

REMARKS

Previously pending claims 1-11 and 13-19 have been cancelled. New claims 20-34 are directed to a method of dry cleaning and/or degreasing textiles and/or leathers. New claims 35-40 are directed to a machine for dry cleaning textile and leathers. Support for the claims is found throughout the specification, and in the original claims and the drawings. Payment is hereby made via EFS-WEB for the fee for one dependent claim in excess of the total of 20 claims for which a fee was paid originally.

Rejection under 35 USC §103

The rejection of claims 1-9 under 35 USC §103 over Kamiya (US 6,136,778) in view of Severns et al. (US 2005/0050644) is not addressed since those claims (directed to a composition) have been cancelled without the presentation of new claims directed to a composition.

Claims 10-12, directed to a method for dry cleaning and/or degreasing textiles and/or leathers, were rejected under 35 USC §103(a) as being unpatentable over Kamiya (US 6,136,778) in view of Severns et al. (US 2005/0050644) and Noyes et al. (US 2005/0256015). Kamiya is cited for teaching the aqueous composition originally recited in claim 1. Since Kamiya does not teach a method of dry cleaning that involves tumbling in a leak-tight enclosure and impregnating the fabrics with the aqueous composition, Severns et al. is cited for teaching those steps. The Office Action asserts that “Kamiya and Severns et al. are analogous arts because they have the same technical difficulty, namely, cleaning home care product.”

Since Kamiya and Severns et al. do not teach the temperature of less than or equal to 45°C and the weight gain of about 5% to 70% recited in claim 10, Noyes et al. is cited for disclosing those limitations. Noyes and Kamiya are also asserted to be “analogous arts because they are in the same field of endeavor, namely, cleaning composition.”

Claims 10-12 having been canceled, Applicants submit that new claims 20-34 which are directed to a method of dry cleaning and/or degreasing textiles and/or leathers, are patentable over the prior art applied against claims 10-12.

Kamiya seeks to maximize the decomposing action of enzymes on fats in aqueous detergent compositions, particularly for home use, by including in the aqueous detergent composition: (a) 0.1 to 20% by weight of essential oils and/or essential oil components, (b) 0.25

to 20% by weight of a surface active agent for solubilizing the essential oils and/or essential oil components; and (c) an enzyme. (See column 5, lines 35-41.) All of the examples of the invention in Kamiya are clearly water-based detergents. Examples 1-26 contain 1 gram of essential oil component in 100 ml of aqueous detergent composition. Examples 27-39 contain 5 grams of essential oil component in 100 ml of aqueous detergent composition. Examples 40-52 contain 3 grams of essential oil component in 100 ml of aqueous detergent composition. Examples 53-76 contain 1 gram of essential oil component in 100 ml of aqueous detergent composition. Finally, Examples 82-92 contain from 0.125 gram to 2.0 grams of essential oil component in 100 ml of aqueous detergent.

Not only is the detergent composition of Kamiya water-based, but all the cleaning processes for which this detergent is suitable according to Kamiya are water-based. In other words, large volumes of water are using in combination with the aqueous detergent in the cleaning processes, such as clothes washing, dishwashing by hand or by machine, washing of bathroom appliances such as bathtubs, toilet bowls and urinals, etc. (See column 1, line 17, to column 2, line 5; and column 30, lines 49-59.)

Severns et al and Noyes et al., both cited as secondary references, aim at making dry cleaning more suitable for home use. These two references, commonly assigned to The Proctor & Gamble Company, name the same eleven inventors, and are directed to similar and related technologies. Severns et al. provides in particular a machine for “treating, refreshing or cleaning fabric articles” (Abstract), and “a kit of consumables, especially suitable for use with the fabric treating apparatus of the present invention” (page 1, right column, paragraph [0011].) The cleaning fluid in Severns et al. contains “at least about 50% by weight” (page 3, paragraph [0058]) of a lipophilic liquid defined as a “non-aqueous solvent capable of removing sebum (page 2, paragraph [0027]). The cleaning fluid of Noyes et al. also contains 50% to 100% by weight of a lipophilic fluid defined as a non-aqueous fluid capable of removing sebum. (See Noyes et al., page 1, right column, paragraph [0013], and page 6, left column, paragraph [0100].)

The background discussions in Severns et al. and Noyes et al. are very similar, and clearly set apart the cleaning methods of Severns et al. and Noyes et al. as being different from “[C]onventional laundry cleaning ... carried out with relatively large amounts of water.” (See both Severns et al. and Noyes et al, at page 1, left column, paragraph [0004]. Both references seek to provide a cleaning method to “minimize shrinkage and wrinkling” associated with

conventional water-based laundry cleaning. (See Severns et al, page 1, paragraph [0008], and Noyes et al., page 1, paragraph [0006].)

Applicants again submit that Severns et al. and Noyes et al. are not “analogous art” relative to Kamiya. A person of ordinary skill in the art would not consider modifying the teachings of Kamiya, which pertain to conventional water-based cleaning using an aqueous detergent composition, with those of Severns et al. and Noyes et al. which pertain to dry cleaning using a mostly non-aqueous cleaning fluid or solvent. The two types of cleaning require the consideration of entirely different factors. In the conventional water-based cleaning of Kamiya, the water used for the cleaning process is ordinarily just discharged. In contrast, for environmental reasons it is important that non-aqueous, organic lipophilic cleaning fluids such as used in Severns et al. and Noyes et al., not be discharged in the sewer. Severns et al. states at page 12, at the end of paragraph [0135], that “it is preferred that the lipophilic cleaning fluid not be disposed down the sewer.”

Severns et al. at page 3, paragraph [0059] teaches that the presence of any significant amount of water should be avoided:

“... it is not recommended to clean or treat fabric articles which are soaking wet. However, most fabric articles contain varying amounts of water absorbed from the air or from contact with the wearer. Such articles as well as the occasional water wet article, e.g., swimwear, can be treated in the present appliance and process.”

As is evident from the above quote, Severns et al. teaches away from applying its teachings to conventional water-based cleaning using large amounts of water such as disclosed in Kamiya.

In view of the foregoing, it is respectfully submitted that claims 20-34 are patentable over the prior art applied against claims 10-12 (Kamiya in view of Severns et al. and Noyes et al.)

Rejection under 35 USC §102(e)

Claims 13-19, directed to a machine for dry cleaning textiles and leathers, were rejected under 35 USC §102(e) over Severns et al. (US 2005/0050644). Claims 13-19 having been cancelled, Applicants submit that new claims 35-39, which are directed to a machine for dry cleaning textiles and leathers, are patentable over the prior art applied against claims 13-19.

As recited in independent claim 35, the claimed machine comprises a door of frustoconical shape projecting outwards from an enclosure in which is mounted a drum, the smaller end of the frustoconical shape being furthest away from the drum, and the door being provided with a pneumatic nozzle mounted centrally in the end wall at the smaller end of the frustoconical shape, the nozzle being situated at a distance from the enclosure and the drum. The location of the pneumatic nozzle at a distance away from the enclosure and the drum ensures that as soon as a spray of the aqueous composition enters into the drum, spraying of the atomized particles spreads throughout all the interior of the drum. In this manner the weight gain of textiles and leathers as a result of impregnation with the aqueous composition is kept low, therefore the impregnation of water into the textiles and fabrics is minimized, and the shrinkage and wrinkling associated with such water gain are avoided.

In contrast, as seen in the schematic representation in Fig. 1 and the cut away side view in Fig. 2 of Severns et al., the nozzle or applicator 26 of the washing apparatus of Severns et al. is provided inside the chamber 1. This nozzle is not located at a distance away from the chamber. With such an arrangement of the nozzle, the weight gain by the textiles and leathers as a result of impregnation by the aqueous composition is higher than in the apparatus claimed by Applicants. This result is consistent with the teaching in Severns et al. that the “fabric-containing chamber retains an amount of the lipophilic fluid up to the absorptive capacity of the fabric contained therein” (page 3, left column, paragraph 0062].) Applicants’ claimed method and apparatus limit to 5% - 70% the weight gain resulting from impregnation of the textiles and/or leathers with the aqueous dry cleaning solution. A higher weight gain may result in shrinkage and wrinkling since the dry cleaning solution is aqueous.

As recited in Applicants’ claims, the nozzle is mounted centrally in the end wall which closes off the smaller end of the frustoconical-shaped door. That is, the nozzle is mounted a distance away from the interior of the enclosure where the textiles are placed for tumbling. The nozzle is not inside the chamber or enclosure as shown in Figs. 1 and 2 of Severns et al.

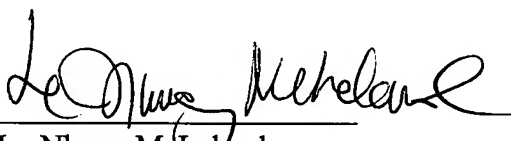
Severns et al. also describes at page 6, paragraph [0088], an alternative arrangement for the nozzle 26 which “can be directly secured to flexible tubular-shaped extension 55”. This arrangement is also entirely different from the provision in Applicants’ claims that the nozzle is mounted centrally in the end wall of the frustoconical-shaped door.

For the above stated reasons, Applicants submit that new claims 35-40 presented herein are patentable over the prior art cited against original claims 13-29, specifically Severns et al.

Applicants believe that the application is in condition for allowance. However, should the Examiner consider that there is any remaining issue and it may be resolved to place the application in condition for allowance, the Examiner is invited to contact Applicants' attorney at the telephone number listed below.

A petition for a three-month extension of the period for reply to the Office Action and the requisite fee are submitted concurrently herewith. In the event of a deficit in the payment of the required fee, please charge the deficit to Deposit Account No. 502081.

Respectfully submitted,
McLELAND PATENT LAW OFFICE, P.L.L.C.

By: 
Le-Nhung McLeLland
Attorney for Applicants
Reg. No. 31,541

11320 Random Hills Road, Suite 250
Fairfax, VA 22030
Tel: (703) 323-4446; Fax: (703) 323-8188
Enclosure: Petition for Extension of Time